



# Storage Sub-committee

## 2012 Work Plan

# 2012 Storage Subcommittee Work Plan

- Report to Congress. (legislative requirement)
  - Review existing and projected research and funding
  - Review existing DOE, Arpa-e projects and the OE 5 year plan
  - Identify gaps and recommend additional topics
  - Outline distributed (review as group)
- Develop and analysis of the need for large scale storage deployment (outline distributed again)
- Develop analysis on regulatory issues especially valuation and cost recovery

# Large Scale Storage

- Problem Statement
  - Situation Today
  - Benefits Analysis
  - Policy Issues
  - Technology Gaps
  - Recommendations
- Renewables Variability
    - Reserves and capacity requirements
    - Financial impacts
    - IRC Response to FERC NOI and update
  - Facilities and Capacities
    - How operated
    - Potential sites
  - Benefits
    - Load following and reserves
    - Avoided capacity
    - Avoided peaking generation
    - Existing financial analyses
  - Policy Issues
    - Siting / permitting
    - Business models / cost recovery
    - Incentives and current legislation
    - Consequences of inadequate storage
  - Technology Gaps
    - Existing R&D and pilot programs
    - CAES
    - Controllable pumping
    - Off shore (energy island, etc)
    - Gravity systems
    - Thermal storage

# Report to DOE / Congress

- Introduction
- Technologies & Applications
- Review of Existing and Projected Research and Funding
- Regulatory and Legislative Activities
- Goals Assessment
- Conclusions
- References
- Background & Objectives
- Technologies & Applications
  - Electro-chemical, mechanical, thermal, electrostatic
  - G, T, D, renewables, Defense, End User
  - Market Readiness
- Existing DOE Programs
  - 5 year plan
  - SGIG storage projects
  - Arpa-e
  - Non- DOE
- Federal – FERC and NERC
  - State survey of activities
  - Standards activities
  - EPA and other related regulatory impacts
- Goals Assessment (per EISA 641 (e) (5))
  - Materials genome project
  - Detailed RPS studies and plant retirements
  - 3 large scale demonstration projects (SGIG)
  - Energy Storage Research Centers (4)
  - Funding for demonstration projects
  - Recommendations